

Country : USSR
Category : Farm Animals. (4-1)
General Problems.
Abs. Jour : Dok Zhur-Biol., No 11, 1958, 72970
Author :
Institut. :
Title :
Orig. Pub. :
Abstract : and by increasing the crops of beets and
potatoes; by increasing the production of pro-
tein fodder from the wastes of the food and
meat-dairy industries. -- M. I. Demina

Card: 2/2

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VIKTOROV, P.I., kand. biol. nauk; NENASHEV, P.D., kand. sel'skokhozyaystvennykh nauk

Generalizing and disseminating progressive work practices in the Northern Caucasus ("Farming in the Northern Caucasus," Reviewed by P.I. Viktorov, P.D. Nenashev). Zhivotnovodstvo 21 (MIRA 12:5) no. 4:93-94 Ap '59.
(Caucasus, Northern--Stock and stockbreeding)

USSR/Farm Animals. The Swine

G-4

Abr Jour : Ref Zhur - Biol., No 11, 1958, No 50057

Author : Viktorov P.I., Kerpke, P.S., Malyugin, Ye.A.

Inst : Krasnodar Scientific Research Institute of Farming

Title : Experimental Fattening of Swine Employing Corn Ear Silage.

Orig Pub : Byul. nauchno-tokhn. inform. Krasnodarsk. n.-i. in-te s. kh.,
1957, vyp. 1, 52-53

Abstract : During a 3 month fattening period 3 groups of swine were fed with the following monthly rations of corn ear silage (in addition to other feeds): the 1st group received 3.5-4.5-6.5 kg of ear silage, the 2nd group received 1-1.5-2 kg, and the 3rd group received 2-3-4 kg. The silage contained 1.54 percent of lactic acid, 0.55 percent of free acetic acid, and 0.09 percent of butyric acid. According to feeding, the average daily weight gains amounted to 670-730-765 kg for each group. The expenditure per each kg of weight increase amounted to 5.3-4.9-4.5 feed units. It is recommended that silage can be fed in proportions of not more than 35 percent of the nutritional value of given rations.

Card : 1/1

USSR/Farm Animals. Swine.

Q-2

Abs Jour: Ref Zhur - Biol., L958, No. 22, 101166

Author : Viktorov, P.I.

Inst : -

Title : Utilizing Corn for Fattening of Swine.

Orig Pub: S. kh. Kubani, Inform. byul., 1957, No. 1,
49-54

Abstract: When fattening young swine for meat, corn fodder in 60-70 percent amounts of the rations' nutritional value should be included, and the rations' protein content should amount to 90-100 g per each fodder unit. Silage prepared from corncobs of milky-waxy ripeness may be included in the rations for young pigs in an amount which does not exceed 30-35 percent of the rations' total.

Card 1/1

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USSR/ Farm Animals. Swine.

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40483.

Author : Viktorov, P. I.

Inst : Not given.

Title : The Protein Feeds of Kuban'.

Orig Pub: Svinovodstvo, 1957, No 8, 29-31.

Abstract: Under conditions prevalent in the Kuban' region, chick peas constitute a valuable feed culture; they are drought-resistant, have a yielding capacity of 20-30 centners per ha., are not affected by bruchus, and can be harvested by a combine. Feeding chick peas to swine in an amount of 27% of the ration corresponds to a feed expense of 5.1 feed units per 1 kg. of weight increase. The digestibility of protein is 85.9%, that of cellulose 52.2%, that of fat - 88.3%, and that

Card 1/2

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Viktorov, P. I.

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Podgotovka i ispol'zovaniye kormov (Preparation and use of fodder) Krasnodar,
Krasnodarskoye Knizhnoye Izd-vo, 1954.
47 p. Illus., Diagr., Tables.

| PROCESSES AND PROPERTIES INDEX | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <p>Effect of valences of electrolytes in mordant dyeing. P. P. VIKTOROV AND A. A. LONCHIKOV. <i>Zhur. Prikladnoi Khim.</i> 3, 1175 (1930); cf. C. A. 23, 1704. — For (mordanting Benzo purp blue the effectiveness of electrolytes is as follows: $\text{NH}_4^+ < \text{Na}^+ < \text{K}^+ < \text{Mg}^{2+} < \text{Ni}^{2+} < \text{Mn}^{2+} < \text{Zn}^{2+} < \text{Cd}^{2+} < \text{Al}^{3+}$. V. KALICHEVSKY</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASAC-3LA METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>100 AND 1000 CODES</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

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Action of mercerizing on durability of dyeing. P. P. VIKTOROV AND G. I. ZILBER
Izvestiya Tekstil. Prom. Torgov. 1936, No. 4-6, 102 A - Rupts. for dyeing white bleached
satin with water contents of 5.8% before mercerization and 7.41% after mercerization
with 3 substantive colors showed that mercerization increases the durability of the dyes.
The explanation offered for this phenomenon, which contradicts E. Knecht's assertion,
is that the dye is able to penetrate deeper into the thickness of the fiber as its cellulose is
loosened by mercerization. J. G. Tolpin

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

| 1ST AND 2ND DEPT'S | | | | | | | | | | 3RD AND 4TH DEPT'S | | | | | | | | | |
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| PROCESSES AND PROPERTIES WORK | | | | | | | | | | | | | | | | | | | |
| <p>Effect of the valence of electrolytes in substantive dyeing. P. P. VIKTOROV AND A. A. LAMZUEV. <i>Izvestiya Tekhnicheskoi Prom. i Torgovli</i> 9, No. 1-2, 121-7 (1968); <i>Chemie & Industrie</i> 24, 243.—The action of electrolytes toward substantive dyes increases according to the valence of their cations, increasing from univalent to trivalent cations, which confirms the law of valences according to which the coagulating power of an electrolyte increases with the valence. Expts. show that, in spite of the higher degree of dissociation of univalent electrolytes, their coagulating action is lower than that of trivalent electrolytes, indicating that valence as well as degree of dissociation affects the coagulation of the dye. In printing with direct dyes, the fiber takes up 10 times as much color in the presence of univalent electrolytes as in the absence of electrolytes, and 30% more in the presence of trivalent than in presence of univalent electrolytes. A. P. C.</p> | | | | | | | | | | | | | | | | | | | |
| <p>ASAC-51.4 METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | |
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| PROCESSING AND PROPERTY INDEX | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1ST AND 2ND LETTERS | | | | | | | | | | | | | 3RD AND 4TH LETTERS | | | | | | | | | | | | |
| <p>Effect of the valence of electrolytes in direct dyeing. P. P. VIKTOROV. <i>Izvestiya Tekstil. Prom. i Torgovl.</i> No. 6-7, 73 (1931). <i>Chemie & Industrie</i> 18, 107. Tests were carried out with 7 different substantive dyes, both technical (of various shades) and pure, in the presence of the following pure electrolytes: Na_2SO_4, H_2SO_4, K_2SO_4, NH_4SO_4, H_2O, MgSO_4, ZnSO_4, CaSO_4, $\text{Al}_2(\text{SO}_4)_3$, H_2O. Differences due to valence are special to each dye; e. g., addn. of MgSO_4, NH_4SO_4 or CaSO_4, equiv. to Na_2SO_4, does not impair pure and blue FF and does not therefore interfere with dyeing, while as little as 5% of these electrolytes is harmful to anil orange P. By proper proportioning of electrolytes having multivalent cations, they can be used to advantage; e. g., 1% $\text{Al}_2(\text{SO}_4)_3$ in H_2O facilitates dyeing with pure anil blue FF; similarly CaCl_2 and MgCl_2 which increase the hardness of water, when added in suitable quantities increase the adsorption of the dye by the fiber.</p> <p>A. PAPINRAU-COUTURE</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASB-11.6 METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

| 1ST AND 2ND COLUMNS | | PRECEDENCE AND PRIORITY | | 100 AND 10TH COLUMNS | |
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| <p>Use of sodium silicate for the cottonization and cleaning of fibers. P. P. VIKTOROV <i>Izvestiya Tekhn. Prom. i Torgani</i> 9, Nos. 6-7, 80-1 (1957), <i>Chimie et Industrie</i> 23, 697-9 (1957).—Addn of Na silicate in cotton-boiling liquors is considered to prevent the formation of rust stains in the presence of Fe-contg. water; recent tests have shown that it also has a favorable effect on the quality of the final white. Filipov's and Vorinkov's formula, which gave good results on cotton and consisted of: NaOH 10 g., contact 5-15 g., 30° B_x, K₂SO₄ 12.5-25 g., 30° B_x, Na silicate 2.5-5 g. per l., has been simplified and applied to the cottonization of hendyr fibers. The wetting action of contact (and other similar products) has little effect on the acceleration and improvement of the cleaning action and the same is true of K₂SO₄. V. adopted the 2 following formulas for cottonization, each requiring boiling for 1 hr. and washing with hot water: (1) NaOH 10 g., 30% Na silicate 10 g. per l.; (2) NaOH 30 g., 30% Na silicate 30 g., 30° B_x NaHSO₄ (to prevent formation of oxycellulose) 10 g. The process is particularly economical as the baths can be used over again since the 1st cooking does not destroy their detergent properties. It also gave good results with flax fibers. Fibers boiled by this process can be bleached with Ca hypochlorite contg. a little NaHCO₃ for 15 min. at 35°.</p> | | | | | |
| A. PAPINEAU-COUTURE | | | | | |
| ASB-56A METALLURGICAL LITERATURE CLASSIFICATION | | | | | |
| SIGNATURE | | | | | |
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Stability of solutions of diazo compounds. I. II. P. P. VIKTOROV. *J. Applied Chem. (U. S. S. R.)*, 4, 777-91, 792-906(1931).—Reducing substances retard the decomn. of the solns. of diazo compds. during the first few hrs. after the solns. are prep'd., but after 24 hrs. their effect can be hardly detected. As the reagent is used as soon as possible after it is prep'd. the above observation is of const. value. Best results were obtained with Na_2SO_3 and poorest with $\text{Na}_2\text{S}_2\text{O}_4$, while for plant operations NaHSO_3 is the most satisfactory reducing agent. The presence of nitrates does not seem to be very harmful and their effect is more of a catalytic than of a direct nature. This is somewhat contrary to the observations of Knecht and Platt (*C. A.* 19, 3184). The use of reducing agents without cooling the mixt. during the diazotization reaction is of no benefit because of its endothermic nature. The rate and degree of decomn. of the diazo soln. of *p*-nitroaniline depends on the OH- concn. of the neutralizing agent. When salts with the same cations are used for neutralization the decomn. is greatest with the salt which has the smallest disson. const., while with the salts contg. the same anions the decomn. is greatest with the salt which has the most basic cation. The only exceptions to this rule are HCO_3Na (reducing action) and CaCO_3 (low soly.). When hydrazines are used as neutralizing agents the decomn. is greatest with the more basic metals. Hydrazides of lower basicity than $\text{Al}(\text{OH})_3$ cannot be used. The quantity of $\text{Al}(\text{OH})_3$ should be double the calcd. amt. Stability of azophores and the products of the diazo compds. with such compds. The presence of β -naphthol favors formation of a colloidal soln. of the diazo compd. with β -naphthol and imparts a yellowish tinge to the dye. This can be avoided only by the use of larger quantities of neutralizing agents which results in the instability of the solns. of the diazo compds. New methods, such as the use of reducing agents, must be found for a satisfactory solution of the problem.

Y. KALICHUKOV

AS 5.54 METALLURGICAL LITERATURE CLASSIFICATION

| COMMON ELEMENTS | | | | | | | | | | | | | | | | | | | | | | | | | |
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| METALLURGICAL LITERATURE CLASSIFICATION | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Analysis of sodium sulfide. P. P. VIKTOROV. <i>J. Applied Chem. (U. S. S. R.)</i> 4, 1062-3 (1931).—Dissolve 15-20 g. of crystal (or 8-10 g. of fused) Na sulfide in 500 cc. distd. water. Dil. 10 cc. of this soln. to 500 cc. and titrate with 0.1 N H_2SO_4. Mix 24 cc. of original soln. with 10 cc. of freshly distd. and neutralized HCHO soln., titrate rapidly half of the total alk. to avoid formation of $HCOOH$, and then slowly till the end point is reached.</p> <p>V. KALICHEVSKY</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

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| A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NM NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OO OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UU UV UW UX UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VU VW VX VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WU WV WW WX WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YY YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>25</p> <p>Use of an acid in the boiling of silk fabrics. P. P. VIKTOROV AND Z. S. BIKOV. <i>Rekonstruktsiya Tekstil. Prom.</i> 11, No. 4, 44-7 (1972); <i>Chimie & Industrie</i> 20, 418 - V. and B. investigated the extent to which acid can replace soap for the elimination of sericin. Two-stage boiling (first with acid, then with soap) was used, and comparative results were made with soap in both stages; picocarmine soln. (5% aq. soln. contg. 4% Na_2HPO_4 and 2% Na_2CO_3) was used to indicate the extent of removal of sericin. Acid generally removes sericin more slowly than does soap, and certain concns. of H_2SO_4 weaken the fiber. With 2 g. H_2SO_4 per l. followed by 5 g. soap per l., approx. the same results are obtained as with soap alone; the action of other acids is dependent on their p_H. HCl acting more energetically than H_2SO_4, and org. acids less energetically. The latter can give as complete removal of sericin as H_2SO_4, by sufficiently increasing the concn. of the bath.</p> <p>A. PAPINRAT-COUTURE</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ASS-ELA METALLURGICAL LITERATURE CLASSIFICATION</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

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Influence of natural admixtures in cellulose on the dyeing properties of cotton fiber. I. P. F. Viktorov and E. O. Vuk'et. J. Applied Chem. (U. S. S. R.) 9, 1640-60 (In German 1936)(1938).—Removal of fats and wax-like substances from the Tashkent cotton by extr. with CaH_2 had no effect on the dyeing properties. Boiling cotton with water until the reaction for sugar is neg., considerably increased the adsorption of dyes. Further treatment of the last samples with NaCHO , which results in a decrease of the N content, again increased that adsorption. Boiling alone is the most effective cotton treatment with respect to adsorption. The physical structure of the fibers changes during bleaching because of chem. and physical treatment of the cotton. Degree of removal of pectin from the fiber should be detd. by the color reaction for pectin and by detn. of the oxidation no. detn. of the alkali ext. Results are tabulated. Thirty-five references.

A. A. Podgorny

Investigation of the application of a layer of chlorovinyl resin on cotton fibers. Chlorovinyl resins. P. P. Vik-torov and V. N. Netkina. Nauch.-Issledovat.-Trudy Khim. Tekstil Inst. S. No. 1, 3-36 (1939); Khim. Referat. Zhur. 1940, No. 4, 96.—Cotton textiles treated with NaOH (3% sol.) or 50% ZnCl₂ were sated. with a boiling 5-8% soln. of chlorovinyl resin and dibutyl phthalate (1:1) in CCl₄, and dried. The sated fabric was tested for strength and elongation to the breaking point, for swelling, for dyeing properties, for stability toward chemicals, against acids and for crease-resistance. The strength of the fabric does not decrease and the elongation to the breaking point increases by several percent. The swelling ability of the fabric after satin. with resin is considerably smaller; however, the subsequent treatment (saponification, etc.) increases the swelling ability of the fabric. The dyeing-absorbance power decreases, owing to the poorer capillarity and wetting of the fabric. Satin. of the fabric with resin after dyeing intensifies the color and increases slightly the resistance to water, to saponification and, sometimes, to light. By combining mercerization without tensile treatment with a satn. of resin + plasticizer (1:1) it is possible to increase the elasticity of the fabric to double its original value.
W. R. Hens

| 1ST AND 2ND ORDERS | | | | | | | | | | 3RD AND 4TH ORDERS | | | | | | | | | |
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| PROCESSES AND PROPERTIES INDEX | | | | | | | | | | | | | | | | | | | |
| <p>Effect of natural admixtures in cellulose on the dyeing properties of cotton fiber. III. The content of pectic substances in cotton fiber. P. P. Viktorov and G. I. Fridlyand. <i>J. Applied Chem.</i> (U. S. S. R.) 12, 113-23 (1939); cf. <i>C. A.</i> 31, 2825. The methods for the detn. of pectic substances were investigated, and the following is recommended: Boil for 30 min. 4-6 g. of cotton in 100 cc. of water and 50 cc. of 0.1 N HCl under a reflux condenser. Filter. Boil again with 3 cc. of 40% NH₄ citrate and 150 cc. of water for 1 hr. Filter. Repeat the process. Neutralize the HCl ext. with 4% NaOH. Combine all filtrates and dil. to 1250-1500 cc. To two 500-cc. samples add 10 cc. of 4% NaOH and let stand overnight. Add 10 cc. 10 N AcOH and 25 cc. 44.4% CaCl₂ soln. and allow to stand for 1 hr. Filter, wash with 50 cc. of 0.5% CaCl₂ and then with water until free from chloride. Wash 3-4 times with hot water, and dry at 100-5° to const. wt. Less mature cotton contains less pectic substance than Egyptian cotton of the same maturity. The best American cotton contains 0.98% of pectic substances. The extractive substances contg. no N contained about 50% of pectic substances. 28 references. III. Removal of pectic substances from cotton by fermenting and the effect of this treatment on the adsorptive properties of fiber. P. P. Viktorov and V. R. Ivanova. <i>Ibid.</i> 251-61 (in French, 201). Taka-diastase, "Pectinol" (German patented prepn.), <i>Penicillium niger</i>, <i>Penicillium</i> prepn. by the biochem. lab. of the Research Inst. of Primary</p> | | | | | | | | | | <p>Treatment of the Novodubnyansk Cultures (U. S. S. R.) and cultures of <i>Bacillus macerans</i> and <i>B. folium</i> were used for fermenting and removal of the pectic substances from cotton fibers. Removal of pectic substances was most rapid and complete with <i>B. folium</i>; next best was <i>B. macerans</i>. The other organisms had very slight action. The fermentation had no chem. effect on the cellulose. The fibers freed from pectic substances by fermentation adsorbed the same amts. of dye as those treated by the standard chem. method. Fats and wax-like substances not removed by the fermentation had no effect on the capillary properties of fiber; N-contg. substances had a slight effect. A decrease of albumin and ash of the cellulose was caused by their soln. in the liquid of the ferment solns., but was not caused by the direct action of the ferments. Seventeen references. IV. The effect of removal of nitrogen-containing substances of cotton on its adsorptive properties. P. P. Viktorov and N. M. Sokolova. <i>Ibid.</i> 440-50 (in French, 450). The treatment of cotton fibers with trypsin and pepsin in neutral and weakly alk. solns. decreased the N content by 40-50%. A weakly alk. soln. itself decreased the N content somewhat. KOH decreased the N content by 50% but CaCl₂ had no effect. Treatment of fibers with KOH and then with trypsin at the best gave the same results as trypsin alone. The adsorptive properties of fibers treated with the enzymes increased somewhat, but this cannot be entirely related to the decrease of N in the fiber. The removal of albumins had only a secondary effect on the capillary properties of the fibers. Eighteen references.</p> | | | | | | | | | |
| A. A. Pudgany | | | | | | | | | | | | | | | | | | | |
| ASB-ELA METALLURGICAL LITERATURE CLASSIFICATION | | | | | | | | | | | | | | | | | | | |
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B-II-6

Influence of natural contaminants of cellulose on the dyeing capacity of cotton fibre. III. Elimination of gummy substances from cotton by fermentation methods; and the effect of this treatment on the adsorptive properties of the fibre. P. E. VIKTOROV and V. R. IVANOVA (J. Appl. Chem. USSR, 1961, 22, 281-281; cf. R., 1960, 818).

The most efficient of a no. of fermentation methods of removal of pectins were those involving the action of cultures of *A. mucosus* or *Aspergillus*. The ash and cellulose contents of the fibre fell to 8-9 and 67% of the original value during the process, while the lignin content remained unchanged. The adsorptive capacity for dyes is greatly enhanced by depurification.

R. T.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION TWO ONE ONE

SECTION ONE ONE ONE

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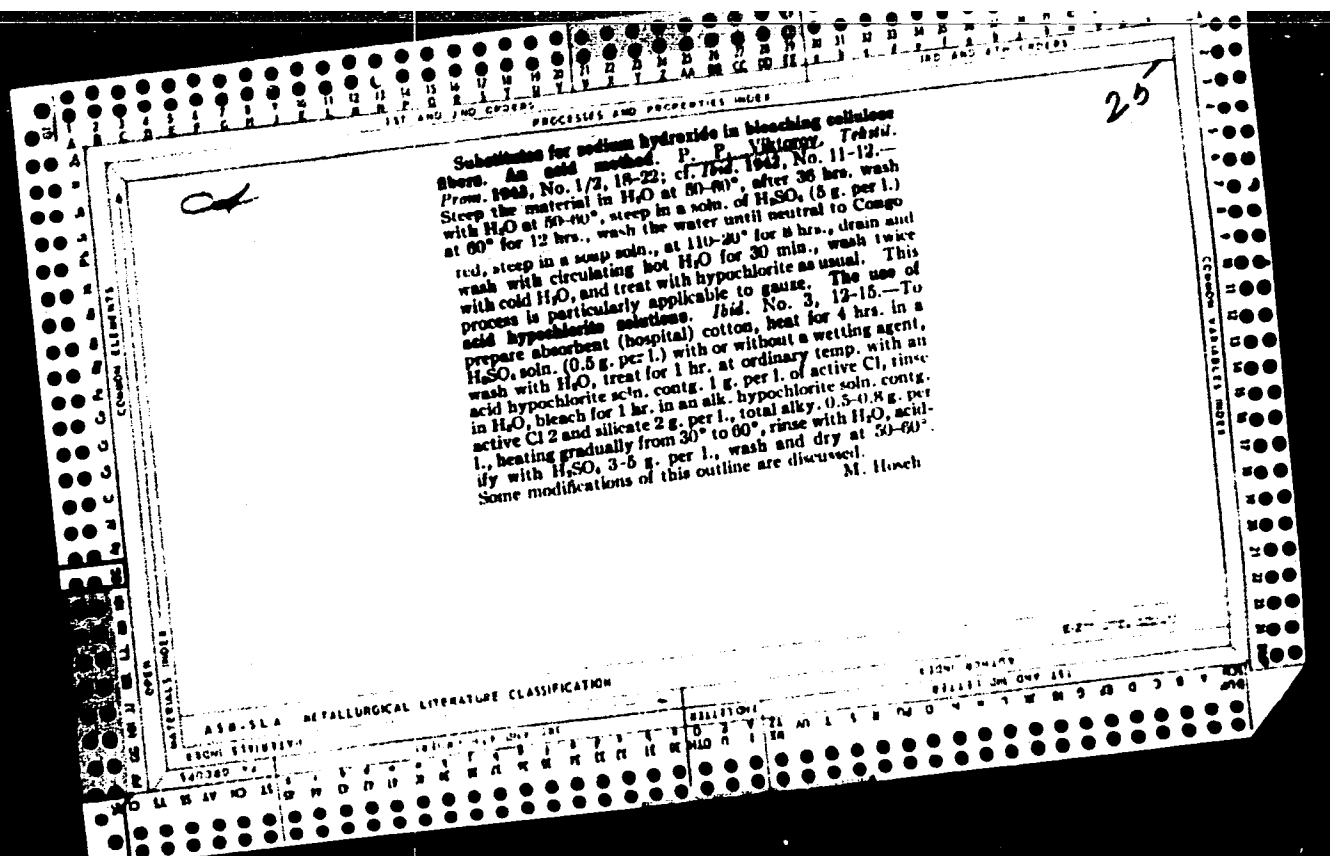
New observation about the purification of cellulosic fiber during bleaching. P. P. Vignoux, *Tekstil. Prom.* 1941, No. 1, 10-11; *Chem. Zvesti.* 1942, 11, 3101. V. starts from the idea that the alteration of phys. properties of the cellulosic fiber by chem. attack constitutes a deciding factor in its purification by bleaching. During the process of removing pectin from the cotton fiber, its phys. condition is changed. Assuming a chem. bond between the cellulose and pectin, V. concludes that the rupture of this bond is accomplished with greater ease, yielding a better product, by treatment with oxidizing agents and mineral acids rather than by boiling with NaOH. The first method serves to spare the natural fats and waxes, leaving the elastic properties of the fibers intact. By subsequent treatment at higher temp. with a Na hypochlorite soln., stabilized with water glass, a product completely free of lignin can be obtained. Exptl. results are detailed in 3 tables. Mark Plungian

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The influence of natural impurities in cellulose on the susceptibility of a cotton fiber to dyeing. V. A study of the action of sulfuric acid in changes of chemical and physical conditions of cotton. P. P. Viktorov, T. P. Kolybova-Archakova and N. M. Sokolova. *J. Applied Chem. (U. S. S. R.)* 14, 108-208 (in German, 20) (1941); cf. C. A. 33, 69434. In cotton purification preparatory to bleaching the pectic material must be removed and the fatty and waxy materials retained. The use of acid boil instead of alkali boil has been adopted by several manufacturing plants (in U. S. S. R.) and the present work was done for the purpose of studying effects of such a treatment on the properties of cotton fibers. Cotton thread number 10 was boiled under reflux with 40 times its wt. of acid, then washed with hot dist. H₂O. Acid concns. used were 5, 2, 1, 0.5, and 0.25 g./l. H₂SO₄. Time of treatment was varied between 1 and 4 hrs. Boiling for 4 hrs. with acid of concn. 0.5 g./l. decreased (a) the N content to 0.12% from 0.24%, (b) fatty matter (calcd. as Ca pectate) to 0.067% from 0.16%, (c) pectic matter (calcd. as Ca pectate) to 0.067% from 0.16%, (d) ash to 0.22% from 1.32%, and (e) copper number to 0.10 from 0.65. Treatment with NaOH (10 g./l.) gave for (a) 0.107%, (b) 0.22%, (c) 0.065%, (d) 0.24%, (e) 0.145%. The retention of H₂O by the crude fiber is to a large degree due to hygroscopicity of the natural impurities in the fiber. Crude fiber boiled for 4 hrs. in 0.5 g./l. H₂SO₄, in dist. H₂O and in 10 g./l. NaOH, and the original cotton had wettability ratios, resp., of 8.5, 6.4, 8.0, and 3.4. The viscosities of solns. of the various samples in cuprammonium soln. were (in centipoises) 2200, 4105, 2380 and 3118, resp. Higher

concns. of H₂SO₄ caused a rapid drop of viscosity, and a corresponding rise of wettability and of copper number. Products of equal wettability can be produced by using 0.25 g./l. acid in presence of the same agents, with the acid-treated NaOH in presence of the same agents, with the acid-treated cotton having lower viscosity (1082 vs. 2385). It is concluded that the chem. compn. of acid-treated cotton is essentially the same as that of alkali-treated, and that the physical changes in the fibers are not directly proportional to the removal of noncellulosic materials. Increase of substantive-dye adsorption is similar for acid-treated and alkali-treated cotton. Treatment by Schweizer reagent showed that both types of boil cause the loss of the fiber cuticle. When cloth was treated instead of thread, the seed-hull particles remained in the final product, since lignin was not affected by the acid, although the actual bleaching was equally effective as it was in control exp't. in which alkali boil was used. Cotton cloth boiled in 0.5 g./l. H₂SO₄ for 4 hrs., then treated with hypochlorite and freed from seed hulls was in no way inferior to alkali-treated material. Running the hypochlorite treatment at 100° with addn. of Na silicate improves whiteness of the cloth and facilitates the removal of the seed hulls, although there is a slight decrease of the tensile strength as compared to hypochlorite treatment at 50-70°. Both hypochlorite treatments give comparable values of viscosity; this indicates absence of chemical degradation by the higher-temp. treatment. The use of a wetting agent, in general, makes the acid treatment more effective.

G. M. Kosolapoff



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| COMMON ELEMENTS | | | | | | | | | | PROCESSES AND PROPERTIES INDEX | | | | | | | | | | 21 | | | | | | | | | |
| 1ST AND 2ND ORDER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p><i>Cd</i></p> <p>Some cases of "paired reactions of combined action." studied in order soap-H₂O and the 0.5% soln. in order P. P. Viktorov. Tekstil. Prom. 4, No. 4, 9-12(1944). - soap-H₂O and H₂O-soap. For pair 4 the same soap-soln. was used. Both solns. were studied in order soap-acid in bleaching NaOH in the process of bleaching textiles As acid was used a soln. contg. 0.5 g. per l. of 100% H₂SO₄. It was observed that the phys. changes occurring in the The Kontakt soln. contained 2 g. per l. The hypochlorite fiber do not become apparent until after another chemical The Kontakt soln. contained 2 g. per l. of active has acted as the same fiber. This combined action was a soln. of bleaching powder contg. 1 g. per l. of active noticed with NaOH and hypochlorite, with mineral acid Cl. The measure of capillarity was the height of ascent and soap and with mineral acid and hypochlorite. This of an eosin soln. through the warp of the test pieces. phenomenon is arbitrarily referred to as "paired reactions Details of procedure are given and the results are tabu- of combined action." To study their effect on the capil-lated. Pairs 1 and 5 produced no capillarity. Of pair 2 larity of cotton fiber, the following "pairs" were investi- neither of the members of this pair (H₂SO₄ and benzene) gated: (1) H₂O and benzene, (2) H₂SO₄ and benzene, (3) of the order, did induce capillarity. In pairs 3 and 4, the H₂O and soap, (4) H₂SO₄ and soap, (5) H₂O and hypo- caused capillarity, but their combined action, regardless chlorite, (6) H₂SO₄ and hypochlorite, (7) Kontakt and 0.1% soap soln. had no effect. The 0.5% solns. were paired: (1) H₂O and benzene, (2) H₂SO₄ and benzene, (3) of the order, did induce capillarity. 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PROCESS AND PROPERTIES INDEX

The effect of H_2SO_4 on linen fabric. P. P. Viktorov. *Tekstil. Prom.* 4, No. 5/6, 17-18(1944).—Linen was brought to boiling in solns. contg. 0.5, 1.0, 1.5 and 2.5 g./l. of H_2SO_4 , allowed to cool for 24 hrs., washed free of acid, kept in boiling H_2O for 8 hrs., washed again and dried. The respective concns. of H_2SO_4 decreased the strength of the linen by 24.3, 27.0, 28.9 and 40.2%. Both tap water and distd. H_2O lowered the strength of the fabric to the same extent as the H_2SO_4 solns. Boiling linen in a 5% silicate soln. (30°Bé.) for 2 hrs. decreased the strength by 10%. Boiling for 2 hrs. in H_2O lowered the original wt. by 10%. A short boiling of the fabric in the cooling liquid without chemicals conserves the strength of the fabric better than does keeping the fabric in the cooling liquid after boiling. The use of chemicals may be omitted entirely as far as the strength of linen is concerned. The fabric is softer if allowed to cool in the liquid in which it was boiled, particularly in the presence of an acid. M. Hosh

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

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25
 Changes in the physicochemical condition of cotton
 fibers occurring due to the action of certain reagents
 R. E. Vikramov (Moscow Textile Inst.). *J. Appl. Chem.*
 (U.S.S.R.) 19, 900-12 (1946). — Unbranched medical gauze
 was exposed to the action of inorg. or org. reagents and
 dried by pressing with an iron heated to 120°. The gauze
 was boiled with the inorg. reagents in a flask equipped with
 a reflux condenser or heated with the org. reagents in a
 Soxhlet extractor. Evidence of phys.-chem. change was
 obtained by analyzing the cotton for waxes, pectins, and
 N-contg. substances, by detg. the capillary rise in the
 Schweitzer's reagent, by detg. the capillary rise in the
 fiber, and by measuring the tenacity of the fibers. Re-
 agents used were bleaching powder (1) in concn. corre-
 sponding to 1 g. active Cl₂, NaOH as an aq. soln. contg.
 10 g./l., NaOH with 1, H₂SO₄ as an aq. soln. contg. 0.5
 g./l., H₂SO₄ with 1, H₂O, C₆H₆, C₆H₅OH with H₂O (1:1 ratio),
 EtOH, EtOH with H₂O (1:1), and EtOH with C₆H₆ (1:1).
 The two different modes of action can be distinguished. The
 vapors from mixts. of org. reagents with H₂O have little
 or no effect on the structure or chem. nature of the fibers.
 (On the other hand, the vapors from the solns. of inorg.
 reagents produce extreme chem. changes in cotton fibers.
 The inorg. reagents destroy the external sheath of the
 cotton fiber and render the inner part of the fiber accessible
 to attack. The natural impurities in the cotton are re-
 moved to a significant degree. In addn., the tensile
 strength of the fiber is markedly reduced. The heat of
 swelling of cotton fibers in aq. alc. was detd. at several
 alc. concns. It reached a max. at approx. 40% EtOH.
 H. K. Livingston

PA 13120

VIKTOROV, P. P.

USSR/Fibers - Physical Properties
Cotton

Sep 1946

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"New Data Concerning Changes in the Physico-chemical
Condition of Cotton Fibers Under the Action of Some
Reagents," P. P. Viktorov, 13 pp

"Zhur Prik Khim" Vol XIX, No 9

Treatment of cotton fibers with mineral and organic
reagents, and study of the changes resulting.

13T28

VIKTOROV, P. P.

Viktorov, P. P. "New data on the uses of the physico-chemical composition of cotton fibers under the effect of certain reactions," in symposium: Issledovaniya v oblasti tsellyulozy i yeye sputnikov, Moscow-Leningrad, 1948, p. 98-122 - Bibliog: p. 121-22

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

VIKTOV, P. P.

Viktorov, P. P. and Ivanova, V. I. - "On measuring wettability", (Of fiber materials), Nauch.-issled. trudy (Mosk. tekstil. in-t), Vol. XI, 1942, p. 112-27.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949).

Problems in the chemistry of cotton and linen bleaching. 2.--II.
P. P. Vukobratov (Teh. prom., 1960, No. 8, 24--26; No. 9, 31--33,

No. 11, 31--33)--I. Various explanations are discussed for the fact that biologically-retted flax (II) is less easy to bleach than mechanically-prepared green flax (III). It is concluded that the looser structure of II offers less resistance to the bleach, and oxidation is assisted by easily oxidized unsaturated natural pigments in II; these may be absent in I, having been converted into rubber-like substances of unknown composition; these lower the wettability of I and thus hinder penetration of the bleaching agent.

II. The chemistry of a prebleaching hypochlorite bleaching process is discussed. The original process, in which grey cotton fabrics were directly treated with hypochlorite before hiving, was abandoned because of the suffocating odour. In a modified process this was avoided by pretreating the fabric with mineral acids but this resulted in a much higher consumption of active Cl than in the normal hypochlorite bleach after hiving. The odour in the original process is attributed to the formation of chloramine derivatives formed from nitrogenous matter which is removed by acid pretreatment. The greater consumption of active Cl in the modified process is attributed to non-nitrogenous substances, e.g., sugars and chlorogenic acid, which are removed in hiving.

III. The cause of the dark coloration of kier liquor in cotton and linen bleaching, and the effects of this on the whiteness of the finished goods, are discussed. The colour had been attributed to pectic substances and N compounds, but experiments show that it is due mainly to carbohydrates and natural pigments in the fibre. The use of lime for hiving produces a higher degree of whiteness than NaOH; the latter has a more drastic action on the colour-producing substances, so producing a darker kier liquor which soils the fabric. Although the use of lime instead of NaOH may be impracticable for cotton bleaching, it could be applied for first-stage bleaching of linen.

E. R. UYAROV.

CA

The chemistry of bleaching of cotton and flax. P. P.
Viktorov. *Tekstil' Prom.* 10, No. 11, 31-36 (1970), 41 C.A.
45, 3614. --A discussion Elizabeth Barabush

VIKTOROV, P.P.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-42, 20 Feb - 3 Apr 1954)

| <u>Name</u> | <u>Title of Work</u> | <u>Nominated by</u> |
|-----------------|---|--------------------------|
| Sadov, F.I. | "Chemical Technology of Fibrous Materials" | Moscow Textile Institute |
| Viktorov, P.P. | | |
| Korchagin, M.V. | | |
| Matetskiy, A.I. | | |

SO: W-3064, 7 July 1954

VIKTOROV, P. P.
VIKTOROV, P. P.

PHASE I
BOOK

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 328 - I

Call No.: TS1449.S2

Authors: SADOV, F. I., VIKTOROV, P. P., KORENAGIN, M. V., and
MATEVSKIY, A. I.

Full Title: CHEMICAL TECHNOLOGY OF FIBROUS MATERIALS (2nd edition)
Transliterated Title: Khimicheskaya tekhnologiya voloknistykh
materialov

Publishing Data

Originating Agency: None

Publishing House: State Scientific Technical Publishing House of
Light Industry (GIZLEGPROM)

Date: 1952

No. pp.: 784

No. of copies: 4,000

Editorial Staff

Editor: Sadov, F. I., Professor

Editor-in-Chief: None

Tech. Ed.: None

Appraisers: Griboyedov, D. N.,
Professor; Klyucharev, S. V.,

Kandidate of Technical
Sciences and

Kop'yev, A. A., Kandidate
of Technical Sciences

Others: Names and contributions of Russian scientists are mentioned

Text Data

Coverage: This is the second edition of a textbook on chemical tech-

AID 328 - I

Khimicheskaya tekhnologiya voloknistykh materialov

nology of fibrous materials by Prof. P. P. Viktorov, Dotsent M. V. Korchagin, and A. I. Mateskiy, greatly expanded and brought up to date. The book consists of five parts. Part I covers natural and man-made fibers. Part II is devoted to preparative processes for the dyeing and printing of fabrics made of natural and man-made fibers. Part III deals with the dyeing of fibrous materials with various dyes. Part IV describes the printing and Part V the finishing of fabrics. Only Russian references are mentioned.

The book seems to be a well-balanced treatment of the theory and practice of the chemical technology of fibrous materials. It might be of practical use because it gives various compositions of baths for dyeing and mentions contributions of Soviet scientists to the improvement of various aspects of dyeing and printing.

Purpose: Approved by the Ministry of Higher Education of the USSR as a textbook for institutions of higher education of the textile industry.

Facilities: Names of Soviet scientists are mentioned.

No. of Russian and Slavic References: 152

Available: Library of Congress.

2/2

VIKTOROV, P.P.

Journal of Applied Chemistry
March 1954
Fibres

DMH

Effect of preparatory treatment on chemical composition of flax.
P. Viktorov (*Tekstil. Prom.*, 1952, 12, Oct., 36-38; *Tekstil-u-Fabrikofftech.*, 1953, 3, No. 6, 267-269; *J. Text. Inst., Manchr.*, 1953, 44, A 789).—A comparison is made of the composition of mechanically separated and retted flax fibre. Tentative explanations are given of the grey colour of dew-retted flax and of the tendering of the green fibre during bleaching. R. B. CLARKE.

Factors affecting the wettability of cotton fibers. N. M. Sokolova, P. P. Viktorov, and P. I. Sadov. *Nauch.-Issledovatel. Trudy Mosk. Tekstil. Inst.* 13, 40-60(1954); *Referat. Zhur., Khim.* 1955, No. 2809.—The removal of crush-wax-like and pectinous substances from the fibers and crushing the primary wall of the fiber did not materially affect the thermal stability of wetting the fiber. This primarily depended on increasing on the accessible surfaces of the fibers the no. of free OH groups in which the strength of the H bond in subsequent drying is low. Another influential factor was making denser the structure of the fiber, which led to reducing the mobility of macromols. This last resulted in a great increase of the stability of the wetting, and particularly in a great thermal stability of the wetting. This was confirmed by infrared absorption spectra for cellulose before and after alkali treatment of cotton fibers.

M. Hosh

Matla 8

VIKTOROV, P.P., professor.

Raising the role of chemical laboratories. Tekst.prom. 14 no.9:
40-41 3 '54. (MLRA 7:11)
(Chemical laboratories) (Textile finishing)

Viktorov, P. P.

USSR.

~~Acrylic resins in dyeing and printing of fabrics. P. P. Viktorov (Textile Inst., Moscow). Tekstil. Prom. 1954, No. 11, p. 1081. By adding basic dye soln. to an aq. suspension of acrylic resins (latex), the latter coagulates to yield colored press powders which are successfully used for dyeing cotton, either by printing from a soln. (org. solvent) or by pigment printing. Elisabeth Barabshi.~~

VIKTOROV, P.P.

USSR.

2 may
C.V. Affinity forces between the dyes and the fiber. P.P.
H. VIKTOROV, Tekstil Prom. 15, No. 7, 25-6 (1955).—A disc-
ussion (cf. Peters and Vickerstaff, C.A. 43, 8234a).
Elisabeth Barabush *# 51*

Viktorov, P. P.

CH Improved ice dyeing. P. P. Viktorov. Tekhn. Prom.
15, No. 12, 39-41(1955).—This improvement consists of
adding strictly controlled optimal amts. of HClO to an
azo dye soln. and keeping the yarn for 30-60 min. in the azo
dye soln. The use of a wetting agent in the azo soln. is
recommended. Elizaveth Barabosh

Viktorov, P.P.

USSR /Chemical Technology. Chemical Products
and Their Application

I-19

Dyeing and chemical treatment of textiles

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32186

Author : Viktorov P.P.

Title : Some Views Concerning the Notion of "Substantive Nature".

Orig Pub: Tekstil'naya prom-st', 1956, No 8, 44-45

Abstract: A critique is presented of the method proposed by Ruggli for determination of the substantive nature of dyestuffs. It is shown, by several examples, that on forming an opinion concerning

Card 1/2

VIKTOROV, R.

Consumer - manufacturer - institute; give the green light to household chemicals. Mest.prom.1 khud.promys. 1 no.2/3:29-30 N-D '60.
(MIRA 14:4)

(Chemicals) (Home economics)

VIKTOROV, V.

A special assignment. Rech. transp. 24 no.5:7 '65.

(MIRA 18:9)

KABLUKOV, D. (gor. Borisoblebsk); VIKTOROV, S. (g. Sorochinsk); ZIMIN, P. (g. Volzhsk).

Correspondence with readers. Tekh. mol. 26. no.12:28 '58..

(MIRA 11:12)
(Oxygen--Industrial applications) (Venus (Planet)) (Nuclear physics)

BUDAGOV, Yu.A.; VIKTOR, S.; DZHELEPOV, V.P.; YERMOLOV, P.F.;
MOSKALEV, V.I.

Elastic scattering of 128 and 152 Mev mesons by protons.
Zhur.eksp.i teor.fiz. 38 no.3:734-746 Mr '60.
(MIRA 13:7)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Mesons--Scattering) (Protons)

VIKTOROV, S.

Useful pamphlets ("Without taxes, with war." by Stepan Zlobin; "Tax
repeal for workers and employees in the U.S.S.R." by D. Burmistrov,
Z. Kosareva). Reviewed by S. Viktorov. Fin. SSSR 21 no.9:82-83 S
'60. (MIRA 13:9)

(Income tax)

(Zlobin, Stepan)
(Kosareva, Z.)

(Burmistrov, D.)

VIKTOROV, S.

"Expansion of Trade and Economic Relations Between the USSR and the Countries of Southeast and the Near East," Vnesh. Torg., No.12, 1955

Translation W-31844, Jul 56

VIKTOROV, S.

Asia, Southeastern - Commerce

Foreign trade problems of the southeastern Asiatic countries, Vnesh.torg. No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

AUTHOR: Viktorov, S.I. 6-58-4-12/18

TITLE: Improvement of the Method of Laying Out Stakes (Utozhneniye metoda rasbivki piketazha)

PERIODICAL: Geodeziya i Kartografiya, 1958, Nr 4, pp. 60-64 (USSR)

ABSTRACT: The present method of laying out stakes has a number of serious disadvantages, e.g. the inscription on the stakes does not agree with the distance between them and the beginning of the line. The author suggests that when tracing long-distance lines, pipelines, and main lines along rivers, laying out stakes should be done in such a manner that distances are measured according to inclined lines passing through the characteristic points of the terrain. As the laying out points are always leveled, reduction of lines to the horizon can easily be carried out according to the elevations between the points. A journal is mentioned, according to which work must be carried out. The method described can be applied to the surveying of all varieties of linear structures except for those along roads. The method offers the following advantages: 1.) Simplification of field work, which, therefore, can be

Card 1/2

Improvement of the Method of Laying Out Stakes

6-58-4-12/18

entrusted to the care of younger workers. 2.) As it is not necessary to calculate either measurements carried out by means of a level or angles of inclination or correctors, work carried out in difficult terrain progresses more rapidly. 3.) The keeping of a journal as recommended here makes it possible to detect errors in time. 4.) Control measurements are necessary only where errors have been committed. 5.) Increased accuracy. There are 2 figures, and 1 table.

AVAILABLE: Library of Congress

1. Surveying--Methods

Card 2/2

AUTHORS: Viktorov, S.P., Yevgen'yev, V.Ye. SOV/32-24-9-43/53

TITLE: Scorifier With Increased Stability for Test Analysis
(Sherber povyshennoy stoykosti dlya probirnogo analiza)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 9, pp 1155-1155 (USSR)

ABSTRACT: The scorifying method is employed in the analysis of materials with respect to rare metals. It consists in the fact that the substance to be analyzed is molten with lead, borax and other additions in chamotte-scorifiers in muffle furnaces. To prevent a corrosion of the scorifiers the authors suggest in the present case the following composition of the melt for the production of the scorifiers: 40 % clay, 45-50 % chamotte, and 10-15 % corundum. The latter should be of a quality equal to the type "electro-corundum". It should also be finely ground (passage through a sieve with 324 mesh per cm²). The carefully mixed mass is diluted with 20-22 % water, and from the paste obtained the scorifiers are formed. After shaping the scorifiers are dried at room temperature for 2 days and then are annealed at 900° for 7 hours. The scorifiers produced this way have been successfully used for experiments at the Leningradskiy monetnyy dvor (Leningrad Mint) since 5 years.

Card 1/2

Scorifier With Increased Stability for Test Analysis

SOV/32-24-9-43/53

▲ASSOCIATION: Leningradskiy monetnyy dvor (Leningrad Mint)

Card 2/2

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859810002-7

S.P. Viktorov

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001859810002-7"

KHRISTOV, N.; VIKTOROV, St.; NIKOLOV, G.

Introduction of metallic head cores for molds, a new way
in casting. Ratsionalizatsiia 13 no. 11:17-18 '63

VOSTOKOVA, Ye.A.; SHAVYRINA, A.V.; LARICHEVA, S.G.; VIKTOROV, S.V.,
doktor geogr. nauk, nauchnyy red.; FEDOROVA, L.N., red.izd-
va; IYERUSALIMSKAYA, Ye.S., tekhn. red.

[Handbook on indicator plants for ground waters and coals in
southern deserts of the U.S.S.R.] Spravochnik po rasteniam-
indikatoram gruntovykh vod i pochvo-gruntov dlia iuzhnykh
pustyn' SSSR. Pod red. S.V.Viktorova. Moskva, Gosgeoltekh-
izdat, 1962. 123 p. platos. (MIRA 15:12)

(Russia, Southern--Indicator plants)

(Russia, Southern--Desert flora)

VIKTOROV, S.V.

Importance of geobotanical ~~indicative~~ studies for agricultural
reclamation of the Ust-Urt. Biul. MOIP. Otd.geol. 37 no.3 142
My-Je '62. (MIRA 15:10)
(Ust-Urt—Pasture research)

VIKTOROV, S.V.

The swamp landscape as an indicator of the properties of peat
waters in the Volkhov Valley. Uch. zap. Mosk. un. no.129:7-26
'48.

. (Volkhov Valley--Water) (Swamps)

(MIRA 11:7)

USSR/Minerals

Gypsum
Medicine - Plants

Jan/feb 49

"Types of Gypsum Spaces in Southern Turkistan,"
S. V. Viktorov, 8 pp

"Byul Mosk Obshch Issy Prirod, Otdel Biolog"
Vol LIV, No 1

One peculiarity of gypsum spaces is the direct
connection of the plant layer with the rock on
which vegetation exists. Points out types that
exhibit this connection of vegetation with sub-
strate within boundaries of an upland gypsum space

41/4986

Jan/feb 49

USSR/Minerals (Contd)

(Kyzyl-Kum and South Fergana), and points out cer-
tain peculiarities in the structure of its plant
layer.

VIKTOROV, S. V.

41/4986

VIKTOROV, S.V.

Some methods of geobotanical observations. Izv. AN SSSR Ser.geog. no.3:63-68
My-Je '53. (MLRA 6:9)
(Phytogeography)

VIKTOROV, S.V.; GELLER, S. Yu., doktor geograficheskikh nauk; redaktor;
SOKOLOVA, T.F., tekhn. redaktor.

[Using geobotanical methods in geological and hydrogeological investigations] Ispol'zovanie geobotanicheskogo metoda pri geologicheskikh i gidrogeologicheskikh issledovaniyakh. Moskva, Izd-vo Akademii nauk SSSR, 1955. 197 p. (MLA 8:7)
(Geology) (Geobotany)

VICTOROV, S.V.

Short outline history of the development and present state of
geobotanical methods in geology. Trudy VAGF no.1:5-10 '55.
(Phytogeography) (Prospecting) (MLBA 9:11)

15-1957-3-2820

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3,
pp 45-46 (USSR)

AUTHORS: Viktorov, S.V., Vostokova, Ye. A., Voronkova, L.F.

TITLE: The Use of Geobotanical Clews for the Detection of
Diastrophism (Ispol'zovaniye geobotanicheskikh prizna-
kov dlya obnaruzheniya tektonicheskikh narusheniy)

PERIODICAL: Tr. Vses. aerogeol. Tresta, 1955, vol 1, pp 89-98

ABSTRACT: The paper describes two instances of detection of dia-
strophic events by changes in the plant cover. In the
Sultansandshar (Khorezm) basin, lines of fractures are
emphasized by the linear distribution of groups of
moisture-loving and salt marsh plant associations. This
phenomenon is the consequence of distinctive hydrogeolo-
gical conditions--the subflow of salty waters along
lines of faults. These associations are clearly dis-
tinguishable against the gray background of desert vege-
tation. The most recent diastrophism in the region of
young structures of southwestern Turkmenia was char-

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15-1957-3-2820

The Use of Geobotanical Claws for the Detection of Diastrophism

acterized by an unhealthy plant cover, and even by the loss of many species. The percentage of surviving plants increases in proportion to the distance from the zone of deformation. The most important cause of the extinction of some plants is the rise of salt water along the fault planes. Therefore, in order to discover faulting by geobotanical claws, one should pay particular attention to linear arrangement of plant associations, to salt marshes, and to the mass extinction of plants or an unhealthy plant cover.

Card 2/2

Ye. A. V.

VIKTOROV, S.V.

Vegetation as an indicator in hydrogeological interpretation of
aerial photographs. Geog.sbor. no.7:140-144 '55. (MLRA 9:1)
(Aeronautics in geology) (Water, Underground) (Photography,
Aerial)

VIKTOROV, S.V.

Geobotanical methods for investigating underground waters.
Razved. i okh. nedr 21 no.4:41-45 J1-Ag '55 (MLRA 9:2)
(Water, Underground)

VIKTOROV, S.V.

Application of geobotanical research to geological surveying.
Sov.geol. no.42:80-90 '55. (MIRA 8:6)
(Geological surveys) (Phytogeography)

VIKTOROV, S.V., doktor geograficheskikh nauk.

What the study of vegetation of Sarykanysh and Assake-Audan
showed us. Priroda 44 No.12:82-84 D '55. (MLRA 9:1)

1. Vsesoyuznyy aerogeologicheskiy trest.

(Sarykanysh Depression--Phytogeography)

VOSTOKOVA, Yelizaveta Alekseyevna; VIKTOROV, S.V., red.; FEDOROVA, L.N.,
red. izd-va; GUROVA, V.A., ~~tekhn.~~ red.

[Geobotanical methods of searching for underground waters in arid
regions of the Soviet Union] Geobotanicheskie metody poiskov pod-
zemnykh vod v zasushlivykh oblastiakh Sovetskogo Soiuza. Moskva,
Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane neдр, 1961.
87 p. (MIRA 14:9)

(Water, Underground)

(Indicator plants)

VIKTOROV, S.V.

Vegetation as an indicator of lithological and hydrochemical conditions
within the range of the Khvalynsk deposits of the Caspian. Biul. MOIP
Otd. biol. 60 no.5:105-107 S-O '55. (MLRA 9:4)

(CASPIAN DEPRESSION PHYTOGEOGRAPHY)
(CASPIAN DEPRESSION--SOILS)

VIKTOROV, S.V.; VOSTOKOVA, Ye.A.

Vegetation cover as an indicator of alkalinity in landlocked basins
of Ust-Urt. Izv.AN SSSR Ser.geog.no.1:91-96 Ja-Y '56. (MIRA 9:7)

1.Vsesoyuznyy Aeregeologicheskiy trest.
(Ust-Urt--Alkali lands) (Plants, Effect of alkaloids on)

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,
p 132 (USSR)

14-57-7-15003

AUTHOR:

Viktorov, S. V.

TITLE:

Lichen Indicators of Lithological and Geochemical
Conditions in the Desert (Lishayniki kak indikatory
litologicheskikh i geokhimicheskikh usloviy v
pustyne)

PERIODICAL:

Vestn. Mosk. un-ta, 1956, Nr 5, pp 115-119

ABSTRACT:

The author presents results obtained in observing the
distribution of lichens among various rocks and vari-
ous soils of the Sernyye Bugry region in the Kara-Kum
desert. It was noted that lichens exhibit definite
lithological affinities. Since lichens affiliate
with particular rocks, they serve as indicators and
make it possible for the rocks to be identified by
airplane surveys and field trips in the desert. The

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14-57-7-15003

Lichen Indicators of Lithological and Geochemical Conditions (Cont.)

author points out that there exist indicator species which undergo definite changes in the geochemical process of sulfur accumulation in variegated silica sandstones. Lecanora desertorum, Aspicilia aspera f. hysspidoides, and, possibly, Squamaria muralis belong to this category. Collema minor and Lecidea decipiens belong to the group which indicates gypsum concentration in the loose sandy loam deposits. In the region under study, the moss Tortula desertorum was observed in deposits on the bed of the Unguz River, principally in places where the deposits were arenaceous, which is fairly loose and virtually free of gypsum. When gypsum concentration increases and the layer becomes denser, this moss gives place to Collema minor, and in the final stages of this process, when deposits have become very rich in gypsum, growths of Lecidea decipiens appear among the Collema minor. The author notes that it is possible to use lichens as lithological indicators, once their lithological affiliations in various regions have been sufficiently clarified.

Card 2/2

N. Ya. T.

AUTHOR: None given 5-3-16/37

TITLE: Chronicle of the Geographic Section (Khronika geograficheskoy sekti)

PERIODICAL: Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Otdel Geologicheskii, 1957, No 3, pp 162-164 (USSR)

ABSTRACT: The following reports were delivered at the meeting of the Geographic Section, Moscow **Society** of Naturalists, from 6 February to 22 March 1957: V.V. Reverdatto (from Tomsk) on the "Blanket Glaciation of Central Siberia and Glacial Plant Relics at the Southern Glaciation Border"; V.L. Levin on the "Types of Sands in the Area West of Caspian Sea"; M.P. Zhabrovskaia on the "Problem of the Nile" (This report was published as a separate publication by the "Geografizdat"); S.V. Viktorov on "Botanic Signs of Rock and Soil Bituminosity in the Southern Ustyurt and in North-Eastern Turkmenistan, A.N. Zelinskiy on "Archeological Pamir Expedition", and Ye.I. Olii on "Karatau Karst (Southern Kazakhstan)".

AVAILABLE: Library of Congress

Card 1/1

AUTHOR:

Viktorov S.V.
Viktorov, S.V.

5-3-37/37

TITLE:

Botanic Signs of the Bituminosity of Rocks and Soils in the South Ustyurt and North-East Turkmenistan (Botanicheskiye priznaki bituminoznosti porod i pochv na yuzhnom Ustyurte i v severo-vostochnoy Turkmenii)

PERIODICAL:

Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Otdel Geologicheskiiy, 1957, # 3, p 181-182 (USSR)

ABSTRACT:

During the period from 1949 to 1951, geobotanists of the All-Union Aerogeological Trust discovered in the area at the Caspian Sea and in the Ustyurt some peculiarities in plants growing on bituminous soils. Considerable variations in size, freakishness, violation of seasonal rhythm, etc., were observed among these peculiarities. These phenomena can be explained by the deep effect of bitumens on the biochemical processes in plants. The author together with Ye.A. Vostokova investigated in 1951 to 1953 the distribution of geobotanical indicators of bituminosity in the south Ustyurt and in the Kunya-Dar'ya valley. Areas with considerable concentration of anomalous plants were found. The concentration of bitumens in soil samples picked up from these areas, was high, amounting to 0.36 %. Phyto-anomalies were discovered also in several other areas, and

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Botanic Signs of the Bituminosity of Rocks and Soils in the South Ustyurt
and North-East Turkmenistan

analyses showed the higher bituminosity of soils in all these
areas.

AVAILABLE: Library of Congress

ВИКТОРОВ, С.В.

VIKTOROV, S.V.

Use of geobotanical data in compiling maps showing the prospects for agricultural utilization of a territory (based on limans) [with summary in English]. Biul.MOIP. Otd.biol. 62 no.2:57-60 Mr-Ap '57.
(CASPIAN DEPRESSION--CROPS AND SOILS) (MIRA 10:8)
(AGRICULTURE--MAPS)

AUTHOR: Viktorov, S.V.

SOV/5-58-4-41/43

TITLE: ~~Vegetation as Indicator of Geo-Chemical Soil Conditions in~~
South Ustyurt (Rastitel'nost' kak indikator pochvenno-
geokhimicheskikh usloviy na yuzhnom Ustyurte)

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody,
Otdel geologicheskiiy, 1958, Nr 4, pp 165-166 (USSR)

ABSTRACT: This is a summary of a report given by the author at a conference of the Moscow Society of Naturalists on 21 April 1958. The author states that it has been established, as a result of studies made on the geo-chemical soil conditions in south Ustyurt, that every group of plants can serve as an indicator of special geo-chemical phases of the weathering crust. He explains his statements by various formulas.

1. Soils--Chemical properties 2. Geophysics 3. Plants--Properties

Card 1/1

VIKTOROV, Sergey Vasil'yevich, starshiy nauchnyy sotrudnik; VOSTOKOVA,
Yelizaveta Alekseyevna; VYSHIVKIN, Dmitriy Dmitriyevich; KHAKIMOV,
V.Z., red.; GEORGIYEVA, G.I., tekhn.red.

[Brief manual of geobotanical surveying] Kratkoe rukovodstvo po
geobotanicheskim s"emkam. Velikie Luki, Izd-vo Mosk.univ., 1959.
165 p. (MIRA 13:1)

1. Kafedra biogeografii geograficheskogo fakul'teta Moskovskogo
gosudarstvennogo universiteta (for Viktorov).

(Phytogeography)

VICTOROV SV.

SV/3012
SV/7.3.6I BOX EXPLOIT
Laboratory of Aerial Surveying

Study, Vol. 8: Materialy VII Vsesoyuznogo mezhdunarodnogo serezhchenskogo nauchnogo simpoziuma - 1 dekabrnya 1956 g. (Materials of the 7th All-Union Interdepartmental Conference on Aerial Surveying, 25 November-1 December 1956) Moscow, Gosgeoltekhizdat, 1959. 300 p. 5,000 copies printed.

Ed. of Publishing House: V. G. Plator; Tech. Ed.: O. A. Gurev; Editorial Commission: E. G. Mal', Corresponding Member, Academy of Sciences USSR; A. A. Logachev, V. P. Khrushchinskii (Resp. Ed.), and E. I. Babitsky.

PURPOSE: This publication is intended for photogrammetrists, geologists, geographers, and other scientific and technical personnel concerned with aerial photography.

COVERAGES: This issue of the Transactions of the Laboratory of Aerial Surveying Methods contains the second part of materials presented at the 7th All-Union Interdepartmental Conference on Aerial Surveying which took place in Leningrad, November 25 through December 1, 1956. Articles treat problems dealing with the creation and application of aerial survey methods in geological, geomorphological, and geophysical investigations. Special attention is directed to aerial survey methods in geological and geomorphological mapping of the Soviet Union. The work is directed toward the development of new scientific methods and techniques of aerial photography are described. References accompany individual articles.

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VIKTOROV, S.V.

Plant associations as ground-water indicators in meadows of
the Turgay Valley. Vest.Mosk.un.Ser.biol., pochv., geol.,
geog. 14 no.2:227-233 '59. (MIRA 13:4)

1. Kafedra biogeografii Moskovskogo gos.universiteta.
(Turgay Gates--Plant communities) (Water, Underground)

BOGDANOV, N.S., kand. arkhitektury; VIKTOROV, S.V., tekhnolog

Introducing new methods of selling in stores. Gor. Khoz. Mosk.
33 no.5:12-17 My '59. (MIRA 12:7)

(Stores, Retail)

VIKTOROV, S.V.

Lithological and geochemical facies of the weathering surface in
deserts and the vegetation cover. *Biul.MOIP.Otd.geol.* 34 no.4:
170-171 J1-Ag '59. (MIRA 13:8)
(Ust-Urt--Desert flora)

VIKTOROV, S.V.

Geochemical facies and vegetation of the bitter-saline muds of
Barsa-Kel'mes. Biol. MOIP. Otd. biol. 64 no.2:113-116 Mr-Apr
'59. (MIRA 12:10)

(Barsa-Kel'mes---Halophytes) (Indicators (Biology))

VIKTOROV, S.V., red.; ENDEL'MAN, G.N., red.; KRASNAYA, A.K., tekhn.red.

[Problems of indicative geobotany] Voprosy indikatsionnoi
geobotaniki. Pod red. S.V.Viktorova. Moskva, 1960. 110 p.
(MIRA 14:4)

1. Moskovskoye obshchestvo ispytateley prirody. Geografi-
cheskaya sektsiya.
(Phytogeography)

VIKTOROV, S.V.

Ecological plant series in connection with the salinization in the
Lake Tuzkan region (Kyzyl Kum). Biul.MOIP.Otd.geol. 35 no.2:164-
165 Mr~Ap '60. (MIRA 14:4)
(Tuzkan Region--Botany--Ecology)

VIKTOROV, S.V.

Plant associations as ground water indicators in the Turgay-Irgiz
semidesert. Biul. MOIP. Otd. biol. 65 no.5:110-114 S-O '60.
(MIRA13:12)

(TURGAY PLATEAU—INDICATOR PLANTS)
(IRGIZ REGION—INDICATOR PLANTS)
(WATER, UNDERGROUND)

VIKTOROV, S.V.; VOSTOKOVA, Ye.A.; FEDOROVA, L.N., red. izd-va; BYKOVA,
~~V.V.~~, tekhn. red.

[Fundamentals of indicatory geobotany] Osnovy indikatsionnoi geobotaniki. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane neдр, 1961. 86 p. (MIRA 14:9)
(Indicator plants)

VIKTOROV, S.V.

Geobotanical signs of karst subsidence processes in a desert. Biol.
MOIP. Otd. biol. 60 no.1:73-75 Ja-F '55. (MIRA 8:7)
(Karst) (Deserts)

MIROSHNICHENKO, V.P., otv. red.; VIKTOROV, S.V., red.; KALESNIK, S.V., red.; KELL', N.G., red.; LEONT'YEVA, Ye.V., red.; SAMOYLOVICH, G.G., red.; KUDRITSKIY, D.M., red. izd-va; KONDRAT'YEVA, M.N., tekhn. red.

[Using aerial photography methods in the study of landforms; transactions] Primenenie aerometodov v landshaftnykh issledovaniyakh; trudy. Moskva, Izd-vo Akad.nauk SSSR, 1961. 304 p. (MIRA 14:11)

1. Soveshchaniye po primeneniyu aerometodov v landshaftnykh issledovaniyakh, Leningrad, 1959.

(Aerial photogrametry—Congresses) (Landforms)

RYABCHENKOV, A.S.; ANTONENKO, K.I.; TITOV, N.A.; CHAPOVSKIY, Ye.G.;
CHURINOV, M.V.; KONOPLYANTSEV, A.Z.; VIKTOROV, S.V.; VOSTOKOVAYA,
Ye.A.; SADOVSKIY, N.D.; KUDELIN, B.I.; OGIL'VI, N.A.;
LUNGERSGAUZEN, G.F.; BRODSKIY, A.A.; SHCHERBAKOV, A.V.; POPOV,
V.N.; YEMEL'YANOVA, Ye.P.; SOKOLOV, S.S.; BERSENEV, I.I.; GROSHIN,
S.I.; MAKHAYEV, A.A.; MARINOV, N.A.; YEFIMOV, A.I.; ASSOVSKIY,
G.N.; VLADIMIROV, A.G. [deceased]; PROKHOROV, S.P.; FILIPPOVA,
B.S., red. izd-va; BYKOVA, V.V., tekhn. red.

[Methodological manual on hydrogeological surveying at the scales
of 1:1,000,000 - 1:500,000 and 1:200,000 - 1:100,000] Metodiche-
skoe rukovodstvo po gidrogeologicheskoi s"emke masshtabov
1:1000 000 - 1:5000 000 i 1:200 000 - 1:100000. Pod obshchei
red. A.A.Makhayeva i A.S.Riabchenkova. Moskva, Gos. nauchno-
tekhn. izd-vo lit-ry po geol. i okhrane neдр, 1961. 318 p.
(MIRA 15:3)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany neдр.
(Water, Underground) (Geological surveys)

VIKTOROV, S.V.; CHIKISHEV, A.G.

Conference on indicative geobotany. Izv. AN SSSR. Ser. geog.
no. 4:161-163 J1-Ag '61. (MIRA 14:7)
(Phytogeography--Congresses)

VINICHAY, S.V.

Geotectonic indications in the weathered surface of coal seams
in the Ust-Urt. Sov.geol. Zh. 2:159 P '61. (Ill. 14:18)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii
i inzhenernoy geologii.

(Ust-Urt-- hydrogeography)

(Ust-Urt--Coal geology)

VIKTOROV, Sergey Vasil'yevich; VOSTOKOVA, Yelizaveta Alekseyevna;
VYSHIVKIN, Dmitriy Dmitriyevich; SOKOLOVA, N.A., red.;
GEORGIYEVA, G.I., tekhn. red.

[Introduction to indicator geobotany]Vvedenie v indikatsion-
nuiu geobotaniku. Moskva, Izd-vo Mosk.univ., 1962. 226 p.
(MIRA 15:9)

(Indicator plants)

VIKTOROV, S.V.

Geobotanical indicators of fresh water in seasonal pastures
of the sandy Kalmyk steppe. Biol. Zhil. Otd. biol. 69 no. 3:
129-132 My-Je '64. (MIRA 17:7)

L 21756-66 EWT(m)/T/EWP(t)/EWA(h) IJP(c) JD
ACC NR: AIG004901 SOURCE CODE: UR/0057/66/036/001/0199/0201

AUTHOR: Viktorov, S.V.; Kocharov, G.Ye; Naydenov, V.O.

ORG: Physicotechnical Institute im. A.F.Ioffe, AN SSSR, Leningrad (Fiziko-
tekhnicheskiy institut AN SSSR)

TITLE: On the possibility of determining extremely small quantities of argon 37 and
tritium

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 1, 1966, 199-201

TOPIC TAGS: proportional counter, radioactivity measurement, argon, tritium,
radioisotope

ABSTRACT: The authors have constructed and tested small proportional counters with the
view to their possible use for determining small quantities of Ar^{37} and H^3 in the
gaseous state. The counters were from 0.1 to 2.7 cm³ in volume and were filled with
argon and methane at 1 atm. The counters were shielded with 360 g/cm² of concrete,
20 cm of iron, and/or 2.5 cm of mercury. The background due to penetrating cosmic rays
was reduced by connecting the proportional counter in anticoincidence with a pair of
plastic scintillation counters. The background of an 0.1 cm³ counter was so far re-
duced that not a single count was recorded during a period of 27 hours in the energy
region of the 2.8 keV Ar^{37} Auger line, although during the same period some 29 counts
were recorded at other energies. It was possible reliably to detect the presence of

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UDC: 539.107.42

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ACC NR: APG004901

1.7 x 10⁶ atoms of H³ in a counter of 1.06 cm³ volume. These results do not represent the limits of the capabilities of the counters described. The authors thank B.P. Konstantinov and M.M.Bredov for their interest in the work and for valuable advice, and V.A.Dergachev, V.V.Petrov, Yu.N.Starbunov, and V.I.Chesnokov for assistance in performing the experiments. Orig. art. has: 1 figure and 1 table.

SUB CODE: 18/

SUBM DATE: 06Jul65/

ORIG REF: 000/

OTH REF: 003

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ACC NR: AP6034225

reduction by a factor of 1.5—2.5 can be obtained by using additional active protection. Orig. art. has: 2 tables.

SUB CODE: 18/ SUBM DATE: 30Aug65/ ORIG REF: 002/ OTH REF: 005/

Card 2/2

VIKTOROV, S.V.

Indication significance of the landform structure in the studies
from the viewpoint of engineering geology. Biul. MOIP Otd. geol.
40 no. 6:155 N-D '65 (MIRA 19:1)

1. Submitted May 18, 1965.

VIKTOROV, S.V.

Geobotanical characteristics of freshwater lenses in *gypsa* deserts.
Bot. zhur. 50 no.6:853-856 Jz '65. (MIRA 18:7)

1. Laboratoriya indikatsionnoy geobotaniki Vsesoyuznogo nauchno-
issledovatel'skogo instituta gidrogeologii i inzhenernoy geologii,
Moskva.